NAME.	LOCALITY.
Nightjar (Caprimulgus europæus)	Eilan Ghlaiss Lighthouse,
	Harris.
Night-Heron (Nycticorax griseus)	Benbecula.
Green Sandpiper (Totanus ochropus)	S. Uist.
Black-tailed Godwit (Limosa belgica)	Benbecula and S. Uist.
Lesser Tern (Sterna minuta)	Barra.
Ivory-Gull (Pagophila eburnea)	Stornoway.
Great Skua (Megalestris catarrhactes)	Harris and Barra.

II. List of Birds which are bracketed as doubtful in the 'Fauna of the Outer Hebrides,' and from which the brackets may now be removed.

Lesser Whitethroat (Sylvia curruca)	Barra.
Garden-Warbler (S. hortensis)	Barra.
Chiffchaff (Phylloscopus rufus)	Barra.
Lesser Redpoll (Linota rufescens)	Barra.
Long-eared Owl (Asio otus)	N. Uist and Barra.
Bittern (Botaurus stellaris)	Harris.
Spoonbill (Platalea leucerodia)	S. Uist and Barra.
Shoveller (Anas clypeata)	Benbecula.
Goosander (Mergus merganser)	The Lews.
Turtle-Dove (Columba turtur)	Several islands.
Grey Phalarope (Phalaropus fulicarius).	Barra and Loch Maddy.

# XIX.—On the Birds of the Gold Coast Colony and its Hinterland. By Capt. BOYD ALEXANDER.

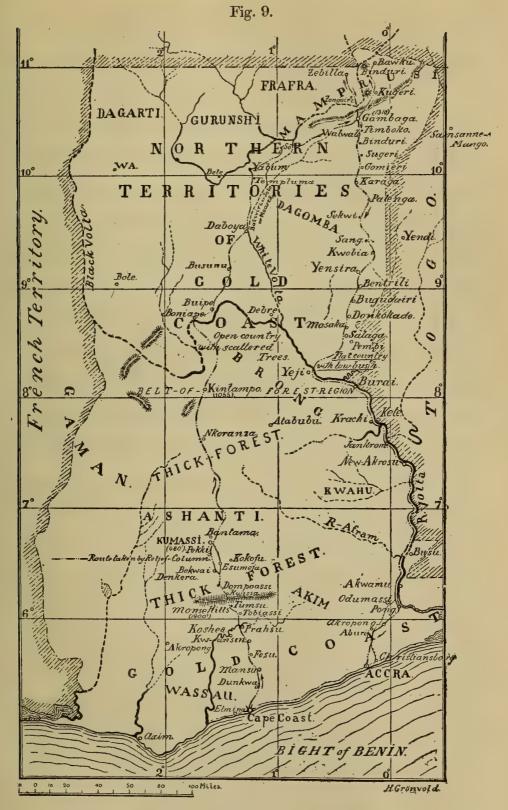
# (Plate VII.)

On the morning of June 1st, 1900, I landed at Cape Coast, and, as a Haussa officer, found myself attached to the Kumassi Relief-Column. The Ashanti rebellion was in full swing. Sinister rumours regarding the fate of Kumassi were rife. The town, being full to overflowing, presented an animated spectacle: traders from up-country, who had barely escaped with their lives, and natives with wild looks in their eyes frequented the streets; while by each mailboat troops, war-like stores, and hundreds of carriers kept pouring in. Throughout June the troops were concentrated at Prahsu, and preparations were made for the general advance to Kumassi. The military operations gave me little time and opportunity to carry out my scientific work, but

# Ibis, 1902. Pl. VII.

Litho W. Greve Berlin S.W

M.G. Sumale.



MAP OF GOLD COAST COLONY. (From Stanford's 'West Africa,' with additions and corrections by Capt. ALEXANDER.)

during my absence at the front my Portuguese collector, José Lopez, did excellent work, and obtained examples of many scarce and little-known species of birds. There were many difficulties to contend with. The rainy season had set in, the leaves dripped with moisture, and water knee-deep blocked the forest-paths; while a small native mud-hut with a leaky roof and a heavy damp atmosphere were sufficient to prevent my skins from drying properly. As the country became more settled, my collector worked his way gradually up to Kumassi, and, owing in a great measure to the consideration shown to him by officers and men alike of the Field Force, he was enabled to make important collections at each station on the lines of communication. In the forest, with its thick undergrowth and high trees, the 12-bore gun with No. 8 shot was the most useful, while the small "410" collecting-guns served us well in the less enclosed portions.

From Cape Coast the forest extends for about 200 miles inland. The ground rises by gentle gradients, till the Monse Hills, 1900 feet in height, are reached. Here the ascent is very steep, but afterwards there is a gradual fall to Kumassi, where the level is 690 feet.

Sometimes the narrow footpath passes through deep streams and stagnant pools, at other times through utter darkness, where gigantic bamboos meet overhead and form a thick covered way, dank and steamy. On first entering the forest, a sense of relief from the burning sun is experienced, but this soon gives way to a feeling of depression. The eternal dull green of the foliage, unrelieved by any shafts of light, offers no change to the eye, and the huge columns of the india-rubber- and cotton-trees, once objects of wonder, soon cease to become so from their very number.

But the forest is not all like this; for there are spots where the sun can penetrate. In such localities, and in the vicinity of villages and spaces cleared by the natives for their farms, the bird-life is wonderful. Weaver-birds in gorgeous breeding-plumage—some studies in yellow, others in scarlet and black—make a buzzing chatter in the tall forest-trees. The "lu-lu" cry of a Golden Oriole (Oriolus nigripennis) breaks, at intervals, the distant silence, while, close to the traveller, the hurried notes of a Babbling-Thrush (Cossypha verticalis) come from the cool depths of the forest-thicket. Where the sun is strongest, the beautiful metallic hues of a Sun-bird (Cinnyris), as it hovers round some tree in full blossom, often catch and please the eye. Then, towards evening, the discordant screech of the Grey Parrots grates upon the ear from time to time, as they journey with rapid flight, high above the tree-tops, to some favourite feedingplace. Away from such spots as these bird-life is scarce.

As the Relief-Column wound its way onward, the deep silence was broken only by the brushing sound of the underwood against the khaki clothing of the men, or now and again by the mellow trill of a Babbling Bush-Thrush (Cossypha) deep in the thicket, following the column as if it had a dread of being left alone in the stilly darkness. On the last day of the march, as the column crept nearer Kumassi, the silence became, if anything, more intense. Men spoke in whispers. By the shadow, the sun was setting somewhere to our left. Everything seemed peaceful. The Thrush was still pouring out its trill of pretty notes, and gave me intense pleasure. Hardly had a minute elapsed before the report of two dane-guns from the enemy's outposts rolled towards us, and the forest that before was silent as the grave, now rang with the report of firearms.

After a three hours' fight the Ashantis were driven into the forest, and our men, like a column of soldier-ants whose journey has been temporarily checked, once more assumed close order and crept into the beleaguered fort.

In November 1900, I left Kumassi with a column of Haussas for Gambaga, the headquarters of the Northern Territories—a three weeks' trek. The transport from the coast is by carriers, who are always a worry and a nuisance. Fantees, Ashantis, and Wongaras are the natives generally employed, the last being by far the best and most useful. It is a very expensive method of conveyance, since by the time a load of 56 lbs. has reached Gambaga—a distance of about 500 miles—the cost comes to over fifty shillings. After the fourth day of our journey the forest became less thick, and the Kola-nut tree (*Cola acuminata*) was plentiful. The trade in Kola-nuts in the countries north of the Gold Coast is most important. In the dry season, large caravans of cattle, bred in Moshi, and in the districts about the River Niger, pass through Gambaga and Salaga on their way to Ashanti, where the cattle are exchanged for Kola-nuts, which the merchant takes back with him into the Soudan, where they are much prized and are in great demand.

At Kintampo (1055 feet), eight days' march from Kumassi, the forest gives way to stretches of undulating country, which rise gradually to Gambaga. Kintampo marks the southern boundary of the Northern Territories. The western frontier is formed by the Black Volta River, the northern by the 11th parallel of north latitude, and the eastern by the German province of Togoland.

The country here is covered with dwarf trees-chiefly acacias and a species with long scanty leaves-interspersed with scrub and coarse grass. The latter grows to a height of nearly six feet during the rainy season, and causes, in many places, impassable obstacles, until it has been burnt by the natives after the rains. The country is watered by two large rivers-the Black Volta and the White Volta,which separate at the village of Debre, and by other smaller affluents and streams, which generally retain water throughout most of the year and become much swollen during the rains. Along the banks of these rivers and streams there are belts of thick woodland, interspersed with large well-proportioned trees and groves of small bamboos; and these belts, always green, mark the windings of the watercourses through stretches made monotonous by dry grass and the almost uniform expanse of stunted treegrowth. Beyond Gambaga (1310 feet), to the northward, the land-level falls 700 feet, and the country becomes less undulating, while it is uplifted here and there into coneshaped hills of from 100 to 600 feet in height, the treegrowth giving way in many localities to open stretches, covered with guinea-corn and maize.

The climate of the Hinterland is far better than that of the coast and the forest-region, and the fever is there of a mild form. The rainy season is from July to November, commencing in Ashanti a month earlier. By the end of October signs of the dry season appear, and then only occasional showers are experienced. Towards the end of November the Harmattan sets in, increasing in strength in December, and lasting till the middle of February ; under its dry and searching influence everything becomes dried up, and the birds leave the open country and seek shelter in the belts of woodland along the streams and watercourses.

Near Gambaga many important forms of bird-life, including several rare Desert-Larks, such as *Heliocorys* modesta and Mirafra erythropygia, were obtained, both in the district itself and to the northward near the Anglo-French boundary, as also in the little-known country around Salaga.

In our Hinterland collection, all the forms are either Senegambian or Abyssinian. There is hardly a forestspecies represented in it, as the list will shew. With the exception of the forest-region, it is difficult to define any exact areas of distribution for West-African birds. The fact of species from North-eastern Africa being found right up in the Gold Coast Hinterland shews that no serious obstacle to a wide distribution exists throughout the littleknown countries directly south of the Sahara, which form, as it were, a roadway between the Nile and Senegambia. According to Lieutenant Joalland of the French Mission to Lake Chad, the country about Zinder, in Northern Haussaland, has an abundant supply of water, the region along the northern shore of Lake Chad is barren and absolutely devoid of food, while Kanem is a series of sand-dunes and oases.

A system of rivers must influence to a great extent the distribution of birds. This is readily perceived on watching the banks and vicinity of the African rivers, for there numbers of birds may be seen congregated and continually moving up and down their courses. These migration-movements take place in the dry season, when food and water are scarce in the open country.

A glance at the map (p. 279) will shew what a network of watercourses there is between Senegambia and the Nile.

At the beginning of May, 1901, I lett Gambaga and trekked to Salaga, and thence on to the River Volta at Yeji, where I took a canoe down to Pong. From this place a two days' trek brought me to Accra. The Volta, which is over 300 yards wide in places, is a beautiful river; its course is very erratic, and the banks are clothed with belts of trees, while here and there the water is broken by groups of rocks, causing rapids, which add to the beauty of the scenery. It is doubtful whether this fine river could ever be utilized for steam-transport, on account of these rapids.

The following is a list of the species of birds obtained during my expedition, references being added to prior observations on the birds of the Gold Coast and Togoland, and usually to the B. M. Catalogue, with field-notes where there is anything special to record.

I have followed the arrangement of Capt. Shelley in the first volume of his 'Birds of Africa.' My best thanks are due to Mr. W. Ogilvie-Grant for much help in the identification of my birds.

1. HEDYDIPNA PLATURA (Vieill.).

Hedydipna platura Hartert, Nov. Zool. vi. p. 415 (1899) (Gambaga).

Nectarinia platura Gadow, Cat. B. ix. p. 10 (1884).

Observed in pairs at Gambaga. In December the males of this species were in full breeding-plumage.

2. NECTARINIA PULCHELLA (Linn.).

Nectarinia pulchella Gadow, Cat. B. ix. p. 7 (1884); Hartert, Nov. Zool. vi. p. 415 (1899) (Gambaga); Shelley, B. Afr. ii. p. 23 (1900).

Gambaga, many specimens. In April and May adults in breeding-plumage were abundant.

3. CINNYRIS CUPREUS (Shaw).

Cinnyris cupreus Gadow, Cat. B. ix. p. 55 (1884);

Reichen. J. f. O. 1891, p. 391 (Togoland); id. J. f. O. 1897, p. 47 (Togoland); Hartert, Nov. Zool. vi. p. 415 (1899) (Gambaga); Shelley, B. Afr. ii. p. 36 (1900).

Abundant in the open country—Cape Coast Castle, Accra Plains, Volta River, and the Hinterland. At Kintampo, where the forest gives way to open country covered with scrub and bush, these little Sun-birds were very numerous in November, either threading their way through the undergrowth or crowding round the tops of the tall trees then in blossom. From March to June adult males were met with; at the end of November immature birds were beginning to assume the adult plumage.

4. CINNYRIS SUPERBUS (Shaw).

Cinnyris superbus Gadow, Cat. B. ix. p. 48 (1884); Reichen. J. f. O. 1897, p. 47 (Togoland).

This is essentially a forest-bird, of which specimens were obtained at Prahsu and Kwissa. We never met with it at Cape Coast Castle, nor at Kintampo outside the forestbelt. In the open spots in the forest, where the sun can penetrate and flower-vegetation is luxuriant, this Sun-bird is plentiful. It is very partial to the young fruit-buds of the paw-paw tree. At the end of June, the middle of the rainy season, adults in perfect plumage were obtained, and in October immature males were assuming the full plumage.

5. CINNYRIS JOHANNÆ Verr.

Cinnyris johannæ Verr. Rev. et Mag. Zool. 1851, p. 314; Gadow, Cat. B. ix. p. 49; Shelley, B. Afr. ii. p. 43 (1900). Specimens obtained at Fumsu and Prahsu.

6. CINNYRIS SPLENDIDUS (Shaw).

Cinnyris splendidus Gadow, Cat. B. ix. p. 50 (1884); Reichen. J. f. O. 1891, p. 392 (Togoland); id. J. f. O. 1897, p. 47 (Togoland); Shelley, B. Afr. ii. p. 45 (1900).

This is by far the most abundant Sun-bird in the Colony. In June, around Cape Coast and even in the town itself, we found it numerous, frequenting the tulip-trees (*Bombax*), then in blossom. Unlike *C. superbus*, this species is not found in the forest, but haunts rough bush-covered localities on its outskirts. We procured specimens at Cape Coast and also at Kintampo, but never found it in Ashanti.

This species appears to pass through several well-defined stages of plumage before that of the adult is assumed. We may divide these stages into four :---

1st stage (nestling).—Like the female, but throat and foreneck dull blackish.

2nd stage.—Throat and fore-neck metallic purple.

3rd stage.—Metallic purple on throat and fore-neck more intense; breast and abdomen clear yellow.

4th stage.—Adult plumage, the crown being the last to assume the metallic colouring.

At Cape Coast, in June, we obtained adult males in full breeding-dress. At the same time young males were in the second and third stages of plumage.

At Kintampo, in November and December, we killed immature males in the *fourth stage*—i. e. the adult plumage, with the exception of a few feathers, was practically assumed.

In the British Museum there are two males, killed at Accra in February, in the *second* stage of plumage; and another male, obtained in August from Senegal, in the same state.

Therefore we have examples of immature birds obtained in February, June, November, and December (months practically embracing the whole year) passing through several phases of plumage, each in its way complete and shewing no direct transitional change.

From this it would seem that it takes at least a year for the young bird to assume its full plumage.

7. CINNYRIS CHLOROPYGIUS (Jard.).

Cinnyris chloropygius Gadow, Cat. B. ix. p. 34 (1884); Reichen. J. f. O. 1897, p. 46 (Togoland); Shelley, B. Afr. ii. p. 83 (1900).

Nectarinia chloropygia Shelley & Buckley, Ibis, 1872, p. 287 (Gold Coast).

Specimens from Prahsu and Kwissa.

8. CHALCOMITRA SENEGALENSIS (Linn.).

Chalcomitra senegalensis Shelley, B. Afr. ii. p. 89 (1900).

Cinnyris senegalensis Gadow, Cat. B. ix. p. 94 (1884); Reichen. J. f. O. 1897, p. 46 (Togoland).

It was not till we reached Gambaga that we noticed this It is the common Sun-bird of the Hinterland, species. resorting to the belts of trees which line the banks of the small watercourses. In December we found it in pairs in full breeding-plumage, frequenting open ground and flying from one low bush to another. At the end of April, when the first rain was experienced, a large tree with shiny leaves, common along the banks of the streams, broke out into white blossoms, like those of our horse-chestnut. These trees were immediately besieged by numbers of this Sunbird, both old and young, the males predominating to a large extent. They were full of activity, the males keeping up a continual chattering-a musical chirp, not unlike that of a Sparrow. The gradations of plumage through which the young bird passes until adult plumage is attained are well defined :---

(a) Nestling; similar to the female, but throat and foreneck dull black.

(b) Chin, upper throat, and chest assuming the adult coloration.

(c) Breast and underparts following suit.

(d) Upper parts, moustachial band, and crown also in full plumage.

This same process of change of plumage is followed in C. gutturalis (cf. Ibis, 1899, p. 560).

# 9. CHALCOMITRA ADELBERTI (Gerv.).

Cinnyris adelberti Gadow, Cat. B. ix. p. 99; Reichen. J. f. O. 1897, p. 46 (Togoland); Shelley, B. Afr. ii. p. 112. Prahsu and Fumsu.

Not common, keeping much to the tops of the tall foresttrees in the neighbourhood of the native villages.

Our immature males, killed in August, have no metallic colouring, and are similar to the female, except that the chin and upper throat are blackish brown and the lower throat buff, thus shewing a perfect plumage in itself.

10. CYANOMITRA OBSCURA (Jard.).

Cyanomitra obscura Shelley, B. Afr. i. no. 63 (1896).

Cinnyris obscura Gadow, Cat. B. ix. p. 77 (1884); Reichen. J. f. O. 1897, p. 46 (Togoland).

Prahsu.

Not common. Breeds in Ashanti at the end of August.

11. CYANOMITRA VERTICALIS (Lath.).

Cyanomitra verticalis Gadow, Cat. B. ix. p. 30 (1884); Reichen. J. f. O. 1897, p. 46 (Togoland); Shelley, B. Afr. ii. p. 127 (1900).

Cape Coast.

12. CYANOMITRA CYANOLÆMA (Jard.). Cyanomitra cyanolæma Shelley, B. Afr. ii. p. 130 (1900). Cinnyris cyanolæma Gadow, Cat. B. ix. p. 78 (1884). Prahsu, but by no means common.

13. ANTHOTHREPTES IDIUS Oberh.

Anthreptes idius Oberholser, Pr. U.S. Nat. Mus. xxii. p. 33 (1899).

Adult &, Prahsu, 16/10/00.

Adult 2, Prahsu, 7/7/00.

This species, of which two specimens were obtained at Prahsu, is very close to *A. fraseri*, but appears to differ in being smaller, with the outermost primary only half as long, and in being rather darker and less yellowish green on the wings and tail.

We have not had the opportunity of examining the type of *A. idius*, but our examples agree pretty well with the description; on the other hand, our adult male agrees with a specimen in the British Museum from Gaboon (*Du Chaillu*).

In the British Museum there are also typical examples of A. fraseri from Comma River, Gaboon, and Fernando Po. These are considerably larger in measurement than our specimens, the outermost primary is twice as long, and the wings and tail are more yellowish green.

This Sun-bird is, in our opinion, a small northern race of *A. fraseri*, and ranges from Liberia to the Gaboon, where it meets and overlaps the range of the southern race, *A. fraseri*.

14. ANTHOTHREPTES LONGUEMARII (Less.).

Anthothreptes longuemarii Gadow, Cat. B. ix. p. 115 (1884); Reichen. J. f. O. 1892, p. 236 (Togoland); id. J. f. O. 1897, p. 45 (Togoland); Shelley, B. Afr. ii. p. 144 (1900).

One adult male from Krachi.

15. ANTHOTHREPTES HYPODILA (Jard.).

Anthrohreptes hypodila Gadow, Cat. B. ix. p. 117 (1884); Shelley, B. Afr. ii. p. 151 (1900).

Prahsu.

16. ANTHOTHREPTES GABONICA (Hartl.).

Anthothreptes gabonica Shelley, B. Afr. i. p. 6 (1896).

Nectarinia gabonica Sharpe, Ibis, 1872, p. 72 (Fantee, Volta R.).

Adult male, Krachi.

17. ZOSTEROPS SENEGALENSIS Bp.

Zosterops senegalensis Gadow, Cat. B. ix. p. 181 (1884); Shelley, B. Afr. ii. p. 173 (1900).

Kintampo, Gambaga, and Krachi.

This species has not been obtained previously in the Colony nor in the Hinterland. It is curious that Capt. Giffard did not meet with it at Gambaga in 1898. The bird is, however, by no means common; it is generally to be found in pairs, searching quietly for insects about the new buds of the trees.

18. PARUS LEUCOMELAS Rüpp.

Parus leucomelas Rüpp. N. Wirb., Vög. p. 100, pl. xxxvii. fig. 2 (1838).

Parus leucopterus Sharpe, Ibis, 1870, p. 480 (R. Volta); SER. VIII.—VOL. II. U Reichen. J. f. O. 1891, p. 392 (Togoland); Hartert, Nov. Zool. vi. p. 415 (Gambaga).

Gambaga and Karaga.

Found in small parties on waste plateaux covered with shrubs.

The male has a pretty song, which it utters as it shoots up into the air.

About the middle of April pairs were abroad with their young.

19. PARISOMA PLUMBEUM (Hartl.).

Parisoma plumbeum Sharpe, Cat. B. iv. p. 269 (1879); Reichen. J. f. O. 1897, p. 26 (Togoland); Shelley, B. Afr. ii. p. 217.

Krachi, in worn plumage.

20. SALPORNIS SALVADORII (Bocage).

Salpornis salvadorii Gadow, Cat. B. viii. p. 330; Shelley, B. Afr. ii. p. 260.

Gambaga and Sekwi.

This species has not been obtained previously on the Gold Coast. Our two specimens agree with one in the British Museum procured by Emin Pasha at Tobbo. In examples in the Museum from Angola and Nyasaland the rufous wash on the under parts is considerably stronger than in our two examples, and the terminal spots on the feathers of the upper parts are better defined. The plumage of our birds, however, is much worn, for they were obtained in the breeding-season, the male specimen having the sexual organs largely developed.

This Tree-creeper is never found where the growth is thick, but in localities where the trees stand as far apart as they do in our English orchards. It is without doubt a rare bird, since from our experience it is by no means shy, while its remarkable spotted plumage is bound to attract attention as it travels along the spreading arms of a tree. During four months of collecting only two specimens were observed or obtained. The natives, moreover, appear to have no name for it.

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Adult 3, Gambaga, 2/4/01. Total length (measured in the flesh) 5.7 inches, wing 3.7, culmen .07, tail 2.4, tarsus 0.4. Iris brown; upper mandible brown, lower horn-coloured; legs and feet brown.

Adult  $\mathfrak{P}$ , Sekwi, 9/5/01. Total length (measured in the flesh) 5.2 inches, wing 3.4, tail 2.3, culmen .075, tarsus 0.4.

21. MOTACILLA FLAVA Linn.

Motacilla flava Sharpe, Cat. B. x. p. 516, pl. vi. figs. 3-5 (1885) (Gold Coast); Shelley, B. Afr. ii. p. 286 (1900).

Budytes flavus Reichen. J. f. O. 1891, p. 390 (Togoland); Reichen. J. f. O. 1897, p. 43 (Togoland).

On April 22, 1901, several parties of these Wagtails put in an appearance for the first time at Gambaga, Another batch appeared by the Prah River, Oct. 26, 1900.

22. ANTHUS TRIVIALIS Linn.

Anthus trivialis Sharpe, Cat. B. x. p. 543 (1885); Reichen, J. f. O. 1891, p. 390 (Togoland); Reichen. J. f. O. 1897, p. 42 (Togoland).

Single individuals were now and then observed from December onwards, and a specimen was obtained at Gambaga in March.

23. MACRONYX CROCEUS (Vieill.).

Macronyx croceus Sharpe, Ibis, 1870, p. 481 (Fantee); Reichen. & Lühd. J. f. O. 1873, p. 217 (Accra); Ussher, Ibis, 1874, p. 70 (Volta); Reichen. J. f. O. 1897, p. 42 (Togoland).

First observed at Gonieri, near Salaga, and thence by the Volta down to Accra. We have no record of this species from Gambaga, nor from the west of the Hinterland. It breeds in May.

24. MIRAFRA BUCKLEYI (Shelley).

Calandrella buckleyi Shelley, Ibis, 1873, p. 142.

Mirafra buckleyi Sharpe, Cat. B. xiii. p. 599.

Our specimens obtained at Gambaga in January and February are in fresh plumage: the vinous on the crown, nape, and mantle is very distinct; while the wing-coverts

**v** 2

and secondaries are broadly edged with pale tawny. The majority of those obtained at Accra in June are in worn breeding-plumage; the vinous on the upper parts and the pale edgings to the wing-feathers have disappeared through abrasion, and the general appearance of the upper parts then becomes pale brown and more uniform.

Owing to the red soil at Accra, the under parts of several of our specimens obtained there are rufous. This Lark is plentiful on the rough scrubby plains around Accra, but further inland in the Hinterland it becomes scarce. At Gambaga it was occasionally observed, generally towards evening, flying for a short distance and then dropping vertically to the ground. In June we found this species breeding; the male birds were constantly to be seen rising vertically into the air for a short distance with a peculiar whirring sound of the wings and then shooting straight as an arrow to earth again.

Adult 3, Gambaga, 28/1/01. Total length (measured in the flesh) 5.3 inches, wing 2.7, culmen .05, tarsus .07. Iris brown; upper mandible brown, lower one bluish horn-coloured; legs and feet whitish flesh-coloured.

The sexes are alike in plumage and dimensions.

#### 25. MIRAFRA ERYTHROPYGIA (Strickl.).

*Mirafra erythropygia* Sharpe, Cat. B. xiii. p. 619; Reichen. J. f. O. 1891, p. 390, 1897, p. 43; Hartert, Nov. Zool. vi. p. 414 (1899) (Gambaga).

Although Capt. Giffard obtained a single example of this rare Lark at Gambaga in 1898, we did not meet with the species in that locality, but we eventually obtained four specimens in worn breeding-plumage at Karaga, near Salaga, which lies near the western boundary of the Hinterland. They were very shy and difficult to approach, frequenting the patches of yam-plantation and using the newly-made hillocks as look-out posts. When disturbed, they would often take refuge in some neighbouring thick-leaved tree, or rise to a considerable altitude in widening circles, dropping quickly to earth again as soon as the cause of danger had disappeared. In flight the rufous underneath the wings is conspicuous.

The adult male of this Lark differs from the female in being more rufous on the wings and tail. The primaries are broadly edged with rufous on their outer webs, while the outer tail-feather is entirely rufous.

The female equals the male in measurements.

The range of this Lark is across Africa from the Gold Coast Hinterland on the west to the White Nile on the east.

26. PYRRHULAUDA MELANOCEPHALA (Licht.).

Alauda melanocephala, Licht. Verz. Doubl. p. 28 (1823),

Fringilla otoleucus, Temm. Pl. Col. iii. pl. 269. figs. 2, 3 (1824).

Pyrrhulauda otoleuca Ogilvie-Grant, Bull. B. O. C. xii. p. 14. We first observed this species on Dec. 23, 1900, near Walwali (lat. 10° 30' N., long. 1° W.). At Binduri, about 40 miles to the north of Gambaga, the bird was again met with on Feb. 20, 1901. There the country is very open, and is in places grown over with guinea-corn and long grass interspersed with short stunted trees. A small dried-up watercourse, with banks of loose stony soil covered by dry grass, was the resort of this species. The birds were in flocks, which consisted of males only, the majority of them being immature.

They were very shy, continually getting up out of gunshot, and with an erratic and dancing little flight disappearing in ever-increasing circles out of sight. The note is a tiny "twit-twit" rapidly repeated.

The two adult males which we obtained had their organs in breeding condition. The immature birds in the flock must have belonged to the first broods.

The stomachs of those obtained contained small grassseeds.

The Black-headed Bunting-Lark ranges from Senegambia to the Niger on the west and thence across Africa to the White Nile, where it meets and overlaps the range of its near ally *P. leucotis*. It differs principally from the latter in having the white collar on the hind-neck broader and the lesser wing-coverts white in place of black.

The type of this interesting species came from Senegal, and there are five specimens from that locality in the Berlin Museum. Mr. Hartert procured examples of it near Sokoto and Wurmer (Nigeria) in 1886.

In February, 1901, we killed five specimens in the Gold Coast Hinterland, where this species appears to be a rare bird, since Capt. Giffard makes no mention of it during his stay at Gambaga in 1898.

Adult 3, Binduri (Gold Coast Hinterland), 24/2/01. Total length (measured in the flesh) 4.4 inches, wing 3, culmen .034, tarsus .06. Iris hazel; bill horny slatecoloured; legs and feet white.

27. GALERITA MODESTA Heugl.

Heliocorys modesta Sharpe, Cat. B. xiii. p. 623.

Heliocorys modesta giffardi Hart. Nov. Zool. vi. p. 415 (1899) (Gambaga).

Adult & & &, Sugeri, 3/5/01. Adult & & &, Gambaga, 27/12/00. Adult & & &, Karaga, 5/5/01. Adult &, Binduri, 20/2/01.

After a careful examination of our fine series of this rare little Lark and a comparison with the examples in the British Museum from Equatorial Africa, I am unable to recognise the validity of the proposed subspecies *H. modesta giffardi*.

According to Mr. Hartert, the characteristics of the subspecies are (a) slightly paler coloration, (b) fore-neck and chest more heavily marked.

These differences in plumage are in my opinion merely due to seasonal change.

Our specimens, killed at the beginning of May, just before the rainy season, are freshly moulted. The feathers of the whole of the upper parts are blackish brown edged with tawny buff, more broadly on the wing-coverts and secondaries, while similar edgings obscure to a great extent the markings on the fore-neck and chest; the breast and abdomen are white washed with tawny, and the crest-feathers are long. Specimens in this plumage would be typical Mirafra bucolica of Hartlaub (Zool. Jahrb. ii. p. 327).

At the end of December, these Larks were breeding at Gambaga, and our four specimens killed at that time are much worn in plumage, while another obtained in February is still more so. In this condition the tawny-buff edgings to the feathers of the breast and upper parts have nearly disappeared through abrasion, the blackish-brown centres to the feathers have become blotched; while the breast and abdomen are white, the tawny wash having disappeared. The general appearance, therefore, of the plumage is much paler and the spots on the fore-neck and chest appear heavier, a state of things brought about by the tawny-buff edgings to the feathers having worn off.

A specimen in the British Museum obtained at Kudurma (near Lado), Nov. 14, 1882, is identical with these birds, which in this plumage are typical of the subspecies *H. m. giffardi*.

Furthermore, our specimens agree well in measurements with examples of H. modesta in the British Museum.

This Lark is by no means common and is a very local species. We came across it for the first time at Gambaga at the end of December, which was the breeding-season. A female, killed on the 29th of that month, contained eggs fully formed. It frequents waste land close to kopjes, underneath the rocks of which the bird nests. During the breeding-season it is next to impossible to flush it, and the only time that we saw it on the wing was in May, when the old birds were in flocks, frequenting the newly-sown fields of guinea-corn. They emit a small piping note.

28. EMBERIZA AFFINIS Heugl.

Emberiza affinis Heugl. J. f. O. 1867, p. 297; Sheiley, B. Afr. i. p. 18.

A scarce bird and only once obtained, at Gambaga.

29. EMBERIZA CABANISI (Reichen.).

Emberiza cabanisi Sharpe, Cat. B. xii. p. 503; Reichen. J. f. O. 1891, p. 390 (Togoland); Reichen. J. f. O. 1897, p. 42 (Togoland); Hartert, Nov. Zool. vi. p. 414 (1899) (Gambaga).

Gambaga.

This species differs from E. major in having the mantle strongly marked, and no white streak down the centre of the crown, both these parts being almost uniform as opposed to the black crown of E. major, while the white on the throat extends lower down.

The female is smaller than the male; the whole of the upper parts are browner; the feathers of the crown, mantle, and rump have scarcely any pale ashy margins; and the white of the chin and eye-streak is washed with orange, the latter colour extending to the chest.

This beautiful Bunting is decidedly scarce and local, frequenting the bush and tree-growth on the banks of streams.

30. FRINGILLARIA SEPTEM-STRIATA (Rüpp.).

Fringillaria septemstriata Sharpe, Cat. B. xii. p. 559; Hartert, Nov. Zool. vi. p. 414 (1899) (Gambaga); Grant, Ibis, 1900, p. 157.

Gambaga and Gomieri.

A scarce and locally distributed species, frequenting, as a rule, stony land sparsely covered with bush. It was breeding at Gambaga in January. In May the two specimens obtained had just completed their moult from the breedingplumage. The chestnut on the wings and under parts was then considerably brighter, as well as the ash-grey on the chin and throat. In our specimens the rufous wedge-shaped mark along the inner web of the outer tail-feather is absent, although it is to be found in the Abyssinian specimen in the British Museum.

This species has not yet been recorded from Togoland, although we obtained specimens near the border of that country. It appears to range across Africa from the Niger to Abyssinia.

31. PETRONIA DENTATA (Sund.).

Petronia dentata Sharpe, Cat. B. xii. p. 295; Hartert, Nov. Zool, vi. p. 414 (1899) (Gambaga).

Walwali, Gambaga, and Karaga.

This species ranges across Africa from the Niger to Abyssinia.

The upper parts of our adult females are uniform fulvous brown, with only a few Sparrow-like markings on the feathers of the mantle; superciliary streak buffy white; upper mandible brown, lower one pale horn-coloured: the immature birds are like the adult female, but have the Sparrow-like markings on the mantle heavier; wing-coverts and secondaries tipped with white; no yellow spot on throat; under parts paler; inner webs of quills below pale rufous; legs and feet slate-coloured. In fully adult males the bill is black.

32. PASSER DIFFUSUS Smith.

Passer diffusus Sharpe, Cat. B. xii. p. 336; Reichen. J. f. O. 1897; p. 41 (Togoland).

Passer simplex Fraser, P. Z. S. 1843, p. 52 (Gold Coast); Shelley & Buckley, Ibis, 1872, pp. 282, 290 (Gold Coast); Reichen. & Lühd. J. f. O. 1873, p. 216 (Accra).

Passer diffusus thierryi Reichen. Orn. Monatsb. 1899, p. 190 (Manga); Hartert, Nov. Zool. 1900, p. 45.

Ad. 3 3 3 3 3, ad. 9 9, Gomieri, May 4, 1901.

Not met with at Gambaga nor in the west of the Hinterland. From Gomieri, near Salaga, down to Accra, this Sparrow is common.

33. SERINUS ICTERUS (Bonn. et Vieill.).

Serinus icterus Sharpe, Cat. B. xii. p. 356 (1888); Shelley, B. Afr. i. no. 285 (1896).

Serinus butyraceus Hartert, Nov. Zool. vi. p. 414 (Gambaga).

Crithagra chrysopygia Sharpe, Ibis, 1870, p. 482 (Fantee); Shelley & Buckley, Ibis, 1872, p. 290 (Gold Coast).

Crithagra chrysopogon Gordon, Contr. Orn. 1849, p. 9 (Gold Coast).

Common at Gambaga and elsewhere.

34. VIDUA PRINCIPALIS (Linn.). Vidua serena Hart. Nov. Zool. vi. p. 413 (Gambaga). Vidua principalis Sharpe, Cat. B. xiii. p. 203. Pong. 35. Coliopasser macrurus (Gm.).

Penthetria macroura Reichen. J. f. O. 1897, p. 40 (Togoland).

Penthetriopsis macrura Sharpe, Cat. B. xiii. p. 220; Reichen. J. f. O. 1891, p. 388 (Togoland).

Cape Coast, Kwobia, Krachi, Pong, and Binduri.

Binduri, near Gambaga, was the northernmost locality determined for this Weaver-bird. It is essentially a species to be found in marshy places—about river-beds and on lowlying ground near the coast. In May the males were in full breeding-dress. It is difficult to assign any exact season when the breeding-plumage is attained. We obtained several adult males in winter dress in May. It is quite possible that the black breeding-dress is not assumed till the second year.

36. Pyromelana franciscana (Isert).

Euplectes franciscana Reichen. & Lühd. J. f. O. 1873, p. 215 (Accra).

Pyromelana franciscana Sharpe, Cat. B. xiii. p. 233; Reichen. J. f. O. 1897, p. 40 (Togoland); Hartert, Nov. Zool. vi. p. 413 (Gambaga).

Accra.

In June this Weaver-bird was in full breeding-plumage.

37. Pyromelana flammiceps (Sw.).

Pyromelana flammiceps Sharpe, Cat. B. xiii. p. 228; Reichen. J. f. O. 1897, p. 40 (Togoland); Hartert, Nov. Zool. vi. p. 413 (Gambaga).

Cape Coast.

During our stay at Gambaga, from January to May, this species was not observed, although Capt. Giffard obtained a male specimen there in August.

Around Cape Coast and Accra, where there are damp reedy localities, this bird was plentiful and in breedingdress. It is probable that after the nesting-season partial migrations occur further inland to the drier situations. This observation also applies to *P. franciscana*. 38. PYROMELANA PHENICOMERA (Gray).

Pyromelana phanicomera Sharpe, Cat. B. xiii. p. 239 (1890).

We procured a single adult female of this species in winter plumage at Kwobia. There is an example in the British Museum, obtained in Camaroon in September by Sir H. Johnston; it is in partial moult, but the feathers of the crown and nape approach those of our bird very closely in coloration and markings. We shall for the present refer our specimen to the Camaroon species.

**39.** Pyromelana Afra (Gm.). Pyromelana afra Sharpe, Cat. B. xiii. p. 241. One female from Karaga.

40. QUELEA QUELEA (Linn.).

Quelea quelea Sharpe, Cat. B. xiii. p. 257; Shelley, B. Afr. i. p. 25.

Binduri, north of Gambaga. Found in large flocks.

41. UROLONCHA CANTANS (Gm.). Uroloncha cantans Shelley, B. Afr. i. p. 27 (1896). Ædemosyne cantans Sharpe, Cat. B. xiii. p. 371.

Obtained in the Hinterland at Gambaga. Dr. Rendall procured two specimens near Bathurst, Gambia (cf. Ibis, 1892, p. 221).

42. NIGRITA EMILIÆ Sharpe.

Nigrita emiliæ Sharpe, Ibis, 1869, p. 384, t. xi.; Ussher, Ibis, 1874, p. 68 (Gold Coast); Reichen. J. f. O. 1875, p. 41 (Togoland).

A young male from Prahsu.

43. Spermestes bicolor (Fraser).

Spermestes bicolor Sharpe, Cat. B. xiii. p. 261; Ussher, Ibis, 1874, p. 70 (River Volta); Reichen. J. f. O. 1897, p. 40 (Togoland).

Prahsu.

This species breeds in August, forming a domed nest of

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dry grass, which is placed between the small branches of a tree, generally an acacia.

44. SPERMESTES CUCULLATUS SW.

Spermestes cucullata Sharpe, Cat. B. xiii. p. 264; Reichen. J. f. O. 1892, p. 222 (Togoland); Shelley, B. Afr. i. p. 28.

Ad. J, 10/1/01, Gambaga. Ad. J 2, 6/4/01, R. Volta (Gambaga). Ad. J, Pong, 26/5/01.

Gambaga, R. Volta, and Pong.

Not common, found in small flocks.

45. ORTYGOSPIZA ATRICOLLIS (Vieill.). Ortygospiza atricollis Sharpe, Cat. B. xiii. p. 270. Obtained at Binduri, north of Gambaga.

46. GRANATINA PHENICOTIS (Sw.).

*Estrilda bengala* Reichen. J. f. O. 1897, p. 39 (Togoland); Hartert, Nov. Zool. vi. p. 414 (Gambaga).

Common, obtained at Gambaga and Gomieri.

47. ESTRILDA CINEREA (Vieill.).

*Estrilda cinerea* Sharpe, Cat. B. xiii. p. 394; Shelley, B. Afr. i. p. 29.

Karaga and Krachi.

In the male the under parts are brighter than in the female, but the dimensions are the same.

48. Estrilda melpoda (Vieill.).

Sporæginthus melpodus Sharpe, Cat. B. xiii. p. 325; Reichen. J. f. O. 1891, p. 389 (Togoland).

Ad. 3 9, 11/11/00, Kumassi. Imm. 9, 30/11/00, Kintampo. Ad. 3 9, 11/5/01, Kwobia.

Kumassi, Kintampo, and Kwobia.

The immature bird has the whole of the breast and abdomen pale buff, contrasting with the light pearly grey of the throat and fore-neck. The crown of the head is almost uniform with the light chocolate-brown of the back. The lores, feathers round the eye, and ear-coverts are less bright than in the adult.

This species is plentiful around Kumassi, consorting

together in large flocks. We found a number of nests attached to the high elephant-grass, which we cleared away the day after the Fort had been relieved.

49. ESTRILDA CAPISTRATA Hartl.

*Estrilda capistrata* Hartl. J. f. O. 1861, p. 259; Sharpe, Cat. B. xiii. p. 390, note (1890).

Pytelia sharpii Sharpe, Cat. B. xiii. p. 303 (1890).

Pytelia capistrata (Hartl.); Reichen. J. f. O. 1897, p. 39 (Togoland).

Adult 3, 22/5/01, Krachi.

50. LAGONOSTICTA NIGRICOLLIS (Heugl.).

Lagonosticta nigricollis Sharpe, Cat. B. xiii. p. 286; Hartert, Nov. Zool. vi. p. 413 (Gambaga); Alexander, Bull. B. O. C. vol. xii. p. 12 (Gambaga).

Rare, found at Gambaga and Binduri.

51. PYTELIA PHŒNICOPTERA SW.

Pytelia phænicoptera Sharpe, Cat. B. xiii. p. 301; Hartert, Nov. Zool. vi. p. 413.

Gambaga, but not common.

#### 52. Spermospiza hæmatina (Vieill.).

Spermospiza hæmatina Sharpe, Cat. B. xiii. p. 498; Reichen. J. f. O. 1891, p. 389, et 1897, p. 38 (Togoland).

An adult male was obtained at Prahsu.

53. PLOCEIPASSER SUPERCILIOSUS (Rüpp.).

Ploceipasser superciliosus Sharpe, Cat. B. xiii. p. 248; Hartert, Nov. Zool. vi. p. 413 (1899) (Gambaga).

A pair was obtained at Gambaga. This species is locally distributed; it lives in small colonies.

Our specimens agree with examples from Abyssinia and with another from Senegambia in the British Museum.

54. ANAPLECTES MELANOTIS (Lafr.).

Anaplectes melanotis Shelley, B. Afr. i. p. 35; Hartert, Nov. Zool. vi. p. 414 (Gambaga).

Occasionally observed.

55. MALIMBUS BARTLETTI Sharpe.

Malimbus bartletti Sharpe, Cat. B. xiii. p. 479; Reichen. J. f. O. 1897, p. 36 (Togoland).

Sycobius malimbus Reichen. u. Lühd. J. f. O. 1873, p. 214 (Aguapim).

Prahsu, Fumsu, Kwissa, and Kumassi.

Immature individuals resemble the adult female, but have the hinder crown and sides of the neck dull crimson, while the black forehead is slightly washed with crimson. The bill is brown.

This species keeps to the thick portions of the forest, and is seldom seen (like other Weaver-birds) in open spots.

56. MALIMBUS MALIMBICUS (Daud.).

Malimbus malimbicus Sharpe, Cat. B. xiii. p. 480; Reichen. J. f. O. 1897, p. 36 (Togoland).

Sycobius nigriceps Hartl. J. f. O. 1855, p. 360 (Gold Coast).

Prahsu and Fumsu.

In our series of eight examples, it is curious that we did not obtain any females. Two of them, however, are sexed " $\varphi$ "; these are not strongly crested. I am inclined to think that the female of this species will be found similar in plumage to the male, with the exception of the crest being less developed and the crimson of the crown not extending so far back.

57. MALIMBUS NITENS (Gray), Malimbus nitens Sharpe, Cat. B. xiii. p. 481. An adult male from Kwissa.

58. MALIMBUS SCUTATUS (Cass.). Malimbus scutatus Sharpe, Cat. B. xiii. p. 482. Three examples from Fumsu.

59. MELANOPTERYX ALBINUCHA (Bocage). Melanoptery c albinucha Sharpe, Cat. B. xiii. p. 477. Prahsu and Fumsu.

Locally distributed, and found in small parties at the tops of the highest forest-trees. During the day, and especially towards evening, the birds may be observed flying from their high points of vantage after insects, and then returning to their perches in the manner of Flycatchers.

60. PACHYPHANTES SUPERCILIOSUS (Shelley).

Hyphantornis superciliosus Shelley, Ibis, 1873, p. 140; Sharpe, Cat. B. xiii. p. 470 (1890).

*Ploceus superciliosus* Reichen. J. f. O. 1891, p. 388; id. J. f. O. 1897, p. 38 (Togoland).

Not by any means a common Weaver-bird, but obtained . at Pong.

61. HYPHANTURGUS BRACHYPTERUS (SW.).

Hyphanturgus brachypterus Shelley, B. Afr. i. p. 38.

Symplectes brachypterus Reichen. J. f. O. 1891, p. 387, et 1897, p. 36 (Togoland).

Ad. J J, 10/6/00, Cape Coast. Ad. J P, 3/7/00; ad. J P, 11/8/00, Prahsu. Ad. P, 17/1/01; ad. P, 18/4/01, Gambaga. Ad. P, imm. P, Pong, 25/5/01.

Cape Coast, Prahsu, Gambaga, and Pong.

This is a common species in the wooded portions of the Colony, but not in the Hinterland. In the immature bird the upper mandible is pale brown, the lower one light horncoloured.

62. HYPHANTORNIS CUCULLATUS (Müll.).

Hyphantornis cucullatus Sharpe, Cat. B. xiii. p. 451; Hartert, Nov. Zool. vi. p. 414 (1899) (Gambaga).

Ploceus cucullatus Reichen. J. f. O. 1891, p. 387; id. J. f. O. 1897, p. 37 (Togoland).

Very abundant at Cape Coast, where it suspends its nests from the higher branches of the tall cotton- and acacia-trees, which are often festooned with an enormous number of them. In the Hinterland the bird again becomes common, the big baobab-trees around the native villages forming the centres of its nesting-colonies. In May these colonies are full of activity—new nests are constructed close to those of the previous season, and the loud running chatter of the males may be heard as they court their mates at the entrance of these nests of basketwork, from which they hang, fanning their wings the whole time to and fro like birds with their feet caught in meshwork.

In June the young males are similar in plumage to the adult females, but have the upper parts uniformly washed with olive-yellow and the under parts with bright yellow; upper mandible brownish horn-coloured, lower mandible paler; iris brown; legs and feet flesh-coloured. By the end of the year the feathers from the breast downwards become white, turning to earthy brown on the sides of the chest and flanks. The olive-yellow wash also disappears from the brown feathers of the upper parts, with the exception of the crown, which still remains olive-yellow. In the beginning of February a direct moult is undergone. The scapulars and rump are the first to assume the adult plumage, and the iris becomes red. By the end of March the bill has become entirely black; iris bright orange; feathers of the crown, sides of face, chin, and throat black; collar deep chestnut; mantle and back particoloured ; remainder of the under parts white, splashed with bright orange-yellow; legs and feet light brown.

About the middle of May the complete adult plumage has been assumed.

I do not think that the adult male assumes a winter dress, since I have observed individuals throughout the year in the same plumage as that of the breeding-season.

63. CINNAMOPTERYX CASTANEOFUSCA (Less.).

Cinnamopteryx castaneofusca Sharpe, Cat. B. xiii. p. 472 (1890).

Ploceus castaneofuscus Reichen. J. f. O. 1891, p. 388, et 1897, p. 37 (Togoland).

Pong.

Breeds in May. The nests, constructed of coarse grassblades and lined with fresh leaves, are suspended underneath the fronds of the palm-tree in damp situations. A large number may be found together. Both male and female share in the incubation. 64. CINNAMOPTERYX TRICOLOR (Hartl.).

Cinnamopteryx tricolor Sharpe, Cat. B. xiii. p. 471.

Ploceus tricolor Reichen. J. f. O. 1897, p. 37 (Togoland).

Not uncommon in the forest, and obtained at Prahsu, Fumsu, and Kwissa.

65. Oriolus brachyrhynchus Sw.

Oriolus brachyrhynchus Shelley & Buckley, Ibis, 1872, p. 288 (Gold Coast); Ussher, Ibis, 1874, p. 65 (Gold Coast); Sharpe, Cat. B. iii. p. 218; Reichen. J. f. O. 1897, p. 35 (Togoland).

Oriolus larvatus Reichen. J. f. O. 1875, p. 37 (Gold Coast).

Prahsu and Fumsu.

Common in the forest, where its flute-like call is often the only bird-voice to be heard.

66. Oriolus auratus Vieill.

Oriolus auratus Sharpe, Cat. B. iii. p. 195; Reichen. J. f. O. 1891, p. 386, et 1897, p. 34 (Togoland); Hartert, Nov. Zool. vi. p. 412 (Gambaga).

Gambaga.

This Oriole is not found in the forest-region. It is generally observed in pairs, frequenting open country, and is probably a resident in the Hinterland; the specimen obtained in January had its organs in breeding condition.

67. Oriolus nigripennis Verr.

Oriolus nigripennis Shelley & Buckley, Ibis, 1872, p. 288 (Gold Coast); Ussher, Ibis, 1874, p. 65 (Gold Coast); Sharpe, Cat. B. iii. p. 220; Reichen. J. f. O. 1897, p. 35 (Togoland).

Prahsu and Fumsu.

This Oriole inhabits the same localities as O. brachyrhynchus, but is not so common.

68. PHOLIDAUGES LEUCOGASTER (Gm.).

Pholidauges leucogaster Sharpe, Cat. B. xiii. p. 121; SER. VIII.—VOL. II. x Reichen. J. f. O. 1891, p. 386, et 1897, p. 36 (Togoland); Hartert, Nov. Zool. vi. p. 412 (Gambaga).

Gambaga, Krachi, and Pong.

A migrant in the Hinterland. Small flocks appeared at Gambaga in May. According to Capt. Giffard, the bird is again common there in August.

# 69. LAMPROTORNIS CAUDATUS (Müll.).

Lamprotornis caudatus Sharpe, Cat. B. xiii. p. 154; Hartert, Nov. Zool. vi. p. 412 (Gambaga).

An adult male from Karaga, where the species is rare. It frequents the open bush-country, nesting in holes in the big baobal-trees.

Our specimen has the back, breast, and wings oil-green, with no trace of purple-blue. It agrees well with a female specimen obtained by Capt. Giffard at Moshi. The sexes are, therefore, alike in plumage.

The similar birds with the purple-blue colour would be L. eytoni (Fras.). There seems to be no reason why it should not stand as a distinct species.

## 70. LAMPROCOLIUS CHLOROPTERUS (Sw.).

Lamprocolius chloropterus Sharpe, Cat. B. xiii. p. 178; Reichen. J. f. O. 1891, p. 386, et 1897, p. 36 (Togoland).

An adult male from Pong.

### 71. LAMPROCOLIUS PURPUREUS (Müll.).

Lamprocolius purpureus Sharpe, Cat. B. xiii. p. 175; Reichen. J. f. O. 1897, p. 35 (Togoland); Hartert, Nov. Zool. vi. p. 412 (Gambaga).

An adult pair from the River Volta, Gold Coast Hinterland, where the species was observed in large flocks. The female is a little larger than the male.

# 72. LAMPROCOLIUS CUPREICAUDA Hartl.

Lamprocolius cupreicauda Hartl.; Sharpe, Cat. B. xiii. p. 184 (1890).

Our specimens were from Prahsu. This species is not found outside the forest-region.

73. ONYCHOGNATHUS HARTLAUBI Gray.

Onychognathus hartlaubi Sharpe, Cat. B. xiii. p. 166.

Prahsu and Kwissa.

This species haunts hilly situations in the forest: it is not found in the bush-country.

74. CORVUS SCAPULATUS Daud.

Corvus scapulatus Shelley & Buckley, Ibis, 1872, p. 289 (Accra); Sharpe, Cat. B. iii. p. 22.

Common throughout the Hinterland, resorting in large flocks towards evening to certain roosting-places. When pairing, the male continually utters a crooning flute-like note.

75. CRYPTORHINA AFRA (Linn.).

Cryptorhina afra Sharpe, Cat. B. iii. p. 75; Hartert, Nov. Zool. vi. p. 412 (Gambaga).

Gambaga.

This is a common species in the open country, consorting together in small flocks, and always to be found where cattle are grazing. It nests in the tops of tall cocoa-nut trees. Its flight is straight and steady, and, when travelling together, these birds give vent to a series of short sharp cries, almost in unison.

The males have the iris claret-coloured, the females hazel.

76. DICRURUS AFER (Licht.).

Dicrurus afer Sharpe, Cat. B. iii. p. 247; Shelley, Ibis, 1901, p. 590.

Prahsu, Fumsu, and Kwissa.

This bird is common in the forest and enclosed country. All our specimens have the crown, back, and upper tailcoverts glossy violet-blue.

77. DICRURUS CORACINUS Verr.

Dicrurus coracinus Reichen. J. f. O. 1897, p. 34 (Togoland); Shelley, Ibis, 1901, p. 590.

Gambaga and Krachi.

Abundant in the open country, especially in cultivated

localities where Indian corn grows. This bird is not found in the forest and enclosed country, as is D. afer, and can easily be distinguished from that species when on the wing by the almost whitish brown inner webs of the primaries, which in the latter are brown, and also by the duller coloration of the upper parts.

#### 78. DICRURUS ATRIPENNIS (Sw.).

Dicrurus atripennis Sharpe, Cat. B. iii. p. 232; Reichen. J. f. O. 1891, p. 386 (Togoland); Shelley, Ibis, 1901, p. 590.

Fumsu and Krachi.

In this species the crown, back, and upper tail-coverts are glossy greenish black.

#### 79. PRIONOPS PLUMATUS (Shaw).

Prionops plumatus Sharpe, Cat. B. iii. p. 320 (1877); Reichen. J. f. O. 1892, p. 236, et 1897, p. 30 (Togoland); Hartert, Nov. Zool. vi. p. 418 (Gambaga).

River Volta, Gold Coast Hinterland.

This bird frequents the wooded banks of the rivers and streams, and is generally observed in small flocks of five or six.

80. SIGMODUS CANICEPS Bp.

Sigmodus caniceps Sharpe, Cat. B. iii. p. 323; Reichen. J. f. O. 1897, p. 301 (Togoland).

Fumsu and River Volta.

This bird frequents the forest in small parties. It is not found in the Hinterland.

In an immature specimen the white bar is on the inner webs of all the quills. The bill is black, yellowish red at the base of the lower mandible.

#### 81. CAMPOPHAGA PHENICEA (Lath.).

Campophaga phœnicea Sharpe, Cat. B. iv. p. 59; Reichen. J. f. O. 1891, p. 384, et 1897, p. 30 (Togoland); Hartert, Nov. Zool. vi. p. 419 (Gambaga).

Gambaga, Yeji, and Krachi.

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82. GRAUCALUS PECTORALIS Jard. & Selby.

Graucalus pectoralis Sharpe, Cat. B. iv. p. 29; Reichen. J. f. O. 1892, p. 235, et 1897, p. 30 (Togoland); Hartert, Nov. Zool. vi. p. 419 (Gambaga).

Gambaga and Krachi.

In our immature specimens several of the feathers on the head and mantle are white, barred with dark brown; the upper tail-coverts shew subterminal bands of blackish brown, and the primaries and secondaries are broadly edged with white, while there are small, arrow-shaped, dark brown spots on the shafts of a few of the breast-feathers and under tailcoverts.

83. GRAUCALUS AZUREUS Cass.

Graucalus azureus Sharpe, Cat. B. iv. p. 27.

Ad. 3, 5/7/00, Prahsu. Ad. 3, 14/9/00, Fumsu.

Prahsu and Fumsu.

Confined to the forest-region, where it is by no means common.

84. CORVINELLA CORVINA (Shaw).

Corvinella corvina Shelley & Buckley, Ibis, 1872, p. 288 (Gold Coast); Gadow, Cat. B. viii. p. 231; Reichen, J. f. O. 1892, p. 236, et 1897, p. 34 (Togoland); Hartert, Nov. Zool. vi. p. 418 (1899) (Gambaga).

Gambaga and Kwobia.

This bird frequents bush-country, and may be seen singly or in small parties travelling from one thick-leaved tree to another, uttering the whole time a chorus of loud chirps. Lizards form its principal food. The flight is even and very straight. Its pose, when perched, is like that of a Shrike. In immature individuals the upper parts are washed with rufous, especially noticeable on the scapulars and rump; the inner secondaries are much barred with brown and edged with pale rufous; there is a broad eye-stripe of dirty white; the feathers of the breast have brown subterminal margins; and there is a large patch of pale rufous on each side of the breast.

In the adult the general colour of the upper surface is ashy

brown, with no tinge of rufous; scapulars ashy grey, wing coverts and secondaries clear brown; feathers of the breast with dark brown shaft-stripes, and on each side a remarkable patch of dark cinnamon.

85. LANIUS SMITHI (Fraser).

Lanius smithii Shelley & Buckley, Ibis, 1872, p. 288 (Cape Coast); Gadow, Cat. B. viii. p. 258 (1883); Reichen. J. f. O. 1897, p. 33 (Togoland).

Krachi and Pong.

A common species from Krachi down to the coast, but not met with in the Hinterland. Young individuals` were found at the end of May. In the immature bird the breast and crown are the first to assume adult plumage.

86. LANIUS AURICULATUS (Müll.).

Lanius senator Reichen. J. f. O. 1891, p. 386, et 1897,
p. 33 (Togoland); Hartert, Nov. Zool. vi..p. 416 (Gambaga). Lanius auriculatus Gadow, Cat. B. viii. p. 283.

Binduri, Gambaga, and Gomieri.

In a young bird the white base to all the primaries is conspicuous, the black forehead is slightly indicated; while the crown, nape, and under parts are strongly vermiculated with brown, and the scapulars and rump are cream-coloured. This bird was killed on the 11th of March—a late date, if *L. auriculatus* is considered to be only a winter visitor to West Africa. At the same time fully adult males were obtained, the last being procured on May 4, 1901. At Gambaga, in March, a pronounced visitation of males in full plumage took place. These were, no doubt, returning northward to Europe. Still it is quite possible, though further dates are required, that a certain number remain in Africa to breed. This would account for our young bird, almost in nestling-plumage, being obtained in March.

87. LANIUS BADIUS Hartl.

Phoneus badius Shelley, B. Afr. i. p. 52.

Lanius badius Gadow, Cat. B. viii. p. 285; Hartert, Nov. Zool. vi. p. 415 (Gambaga).

In our specimen the 5th, 6th, and 7th primaries have

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white bases; the sides of the face, chest, flanks, and scapulars are washed with pale buff; the thighs are white, barred with dark brown.

88. LANIUS GUBERNATOR (Hartl.).

Lanius gubernator Sharpe, Bull. B. O. C. x. p. vii (Gambaga).

Enneoctonus gubernator Shelley, B. Afr. i. p. 53.

Gambaga and Sekwi (near Salaga).

The occurrence of this Shrike, previously known only from Eastern Equatorial Africa, at Gambaga is remarkable. It is probably only a migrant to the Hinterland; the majority of birds observed were males.

89. NILAUS AFER (Lath.).

Nilaus afer Shelley, B. Afr. i. p. 53; Reichen. J. f. O. 1892, p. 236, et 1897, p. 30 (Togoland); Hartert, Nov. Zool. vi. p. 418 (Gambaga).

River Volta and Gambaga.

The feathers of the crown in our adult female are brown. One example (marked " $\mathcal{J}$ ") has also a brown head, but it shews unmistakable signs of becoming black. The immature birds, no doubt, are similar to the adult female as regards the crown of the head.

This Shrike is not common, and is generally seen singly or in pairs. It is very active, and runs along the branches and limbs of trees after the manner of a Nuthatch.

90. LANIARIUS MAJOR Hartl.

Laniarius major Shelley B. Afr. i. p. 54.

Dryoscopus major Gadow, Cat. B. viii. p. 135; Reichen. J. f. O. 1891, p. 384, et 1897, p. 31 (Togoland).

Ad. & & &, 27/5/01, Pong.

Common in marshy situations along the lower reaches of the Volta River. The note is hoarse and guttural, like that of the bull-frog.

91. LANIARIUS BARBARUS (Linn.).

Laniarius barbarus Gadow, Cat. B. viii. p. 153; Reichen.

J. f. O. 1897, p. 31 (Togoland); Hartert, Nov. Zool. vi. p. 418 (Gambaga).

Upper White Volta.

This beautiful Bush-Shrike haunts thick undergrowth on the banks of the Volta River, being distributed in pairs from source to mouth. We never found it in any other locality, and it is essentially a river-loving species. In April it was breeding. From two of the specimens obtained we took out complete eggs. At that time the male birds were very noisy, uttering at short intervals throughout the heat of the day their loud peculiar notes, like the clang of a broken bell, which were often followed by a whirring noise made by the wings.

92. DRYOSCOPUS GAMBENSIS (Licht.).

Dryoscopus gambensis Gadow, Cat. B. viii. p. 146; Reichen. J. f. O. 1891, p. 384, et 1897, p. 31 (Togoland); Hartert, Nov. Zool. vi. p. 418 (Gambaga).

Gambaga, Karaga, and Krachi.

Breeds in April. The call of this species is loud and flute-like. We observed it frequenting acacia-trees and picking off the young shoots with avidity. It is common, but found only outside the forest-region.

93. DRYOSCOPUS SABINII (J. E. Gray).

Dryoscopus sabinei Gadow, Cat. B. viii. p. 143.

Prahsu and Kwissa.

Our immature male is similar in plumage to the adult female, but it shews signs, without a direct moult, of assuming the adult male plumage: the light grey of the crown and nape is mottled with black, while several of the tail-feathers are gradually becoming black from their bases downwards.

94. BOCAGIA MINUTA (Hartl.).

Bocagia minuta Shelley, B. Afr. i. p. 55.

*Telephonus minutus* Sharpe, Ibis, 1869, p. 383 (Fantee); Gadow, Cat. B. viii. p. 128; Reichen. J. f. O. 1891, p. 385, et 1897, p. 33 (Togoland).

Krachi and Pong.

This species is not found in the Hinterland, but on the lower reaches of the Volta River from Krachi downwards. It frequents the low marshy ground, overgrown with high grass, close to the river. The birds are seldom seen during the day, but towards evening may be observed perched on branches of prominent shrubs amongst the tall grass. All our specimens are fully adult, the males having their crowns glossy jet-black, with no white superciliary streak as in female examples.

95. TELEPHONUS SENEGALUS (Linn.).

Telephonus senegalus Gadow, Cat. B. viii. p. 124; Reichen. J. f. O. 1891, p. 385, et 1897, p. 32 (Togoland); Hartert, Nov. Zool. /vi. p. 418 (Gambaga).

Kintampo, Gambaga, and Pong.

In our immature specimens the under parts, except the throat and middle of abdomen, which are white, are ashy grey—stronger on the flanks and chest, and becoming pale ochraceous on the thighs and under tail-coverts; the crown is black, mottled with ashy brown; the superciliary streak ochraceous buff; the bill blackish brown, the lower mandible pale horn-coloured at the base.

In the adult specimens the ashy grey under parts of the immature birds become clear grey, with scarcely any trace of ashy; the crown and bill are black, the superciliary streak is white from the nostrils to the eye.

96. MALACONOTUS SULPHUREIPECTUS (Less.).

Malaconotus sulphureipectus Shelley, B. Afr. i. p. 56.

Laniarius sulphureipectus Gadow, Cat. B. viii. p. 159; Reichen. J. f. O. 1891, p. 385, et 1897, p. 31 (Togoland).

Cape Coast and River Volta.

The adult female is slightly larger than the male, and has the chest less strongly washed with orange; the blue-grey of the mantle extends to the back; the wing-coverts and secondaries are edged with pale yellow.

97. MALACONOTUS POLIOCEPHALUS (Licht.).

Malaconotus poliocephalus Shelley, B. Afr. i. p. 57; Hartert, Nov. Zool. vi. p. 418 (1899) (Gambaga). Laniarius poliocephalus Gadow, Cat. B. viii. p. 156; Reichen. J. f. O. 1897, p. 32 (Togoland).

Gambaga.

98. NICATOR CHLORIS.

Nicator chloris Shelley & Buckley, Ibis, 1872, p. 288 (Abouri); Gadow, Cat. B. viii. p. 166; Reichen. J. f. O. 1891, p. 385 (Togoland).

Prahsu and Fumsu.

This species inhabits the thickest portions of the forest. Its alarm-note is a guttural "churr," rapidly repeated. The male is rather smaller than the female

99. Hypergerus atriceps (Less.).

Hypergerus atriceps Sharpe, Cat. B. vii. p. 352. Pong.

A rare species, which frequents damp places overgrown with palm and bamboo. It is a graceful and remarkablelooking bird and difficult to approach.

100. CRATEROPUS PLATYCERCUS (Sw.).

Crateropus platycercus Sharpe, Cat. B. vii. p. 471; Reichen. J. f. O. 1897, p. 48 (Togoland); Hartert, Nov. Zool. vi. p. 422 (Gambaga).

Gambaga, Batenga, and Salaga.

Found in small parties, frequenting rocky tree-covered localities in the open country.

101. CRATEROPUS STICTOLÆMUS Alexander.

Crateropus stictilæma Alexander, Bull. B. O. C. vol. xii. p. 10 (Gambaga).

Crateropus reinwardti Reichen. J. f. O. 1897, p. 48. Upper White Volta (Gambaga).

This species is nearly allied to *C. reinwardti*, but differs in having the cheeks dark ashy, in place of jet-black, shading gradually into the pale colouring of the throat instead of being sharply defined, while the mottling of the throat extends up to the chin.

Total length (measured in the flesh) 9.5 inches, wing 4.7, tail 5.2, tarsus 1.3. Iris light lemon-coloured; legs and feet slaty brown.

The sexes are alike in plumage. In immature birds the feathers of the wing are reddish brown, not dark brown, and lack the olive tinge.

This also applies to the young of C. platycercus.

In the British Museum, C. reinwardti and C. stictolæmus are represented by the following specimens :---

C. reinwardti.			C. stictolæmus.		
Adult:	Gambia	(Jardine).	Adult:	Fantee	(R. B. Sharpe).
"	59 ×	(Jardine).	<b>39</b> .	"	(Ussher).
"	<b>3</b> 7	(Rendall).	. 29		(Ussher).
>>	Casamance	(coll. Sharpe).	"	Accra	(Shelley).
			"	<b>?7</b>	(Buckley).
			Adult $Q$ : Shonga (W. A. Forbes).		
, I			Adult J: Gambaga (Northcott).		

We found this new *Crateropus* on the Upper White Volta River, frequenting the thick undergrowth by the banks. In habits it resembles other members of the genus, but, unlike *C. platycercus*, is not found in the open country. Throughout the breeding-season it is met with in small parties.

102. Pycnonotus barbatus (Desf.).

*Pycnonotus barbatus* Sharpe, Cat. B. vi. p. 146; Reichen. J. f. O. 1891, p. 390, et 1897, p. 43 (Togoland); Hartert, Nov. Zool. vi. p. 422 (1899) (Gambaga).

Prahsu, Gambaga, and Salaga.

This is an abundant species, both in the forest-country and the Hinterland.

103. Andropadus virens Cass.

Andropadus virens Sharpe, Cat. B. vi. p. 109; Reichen. J. f. O. 1897, p. 44 (Togoland); Hartert, Nov. Zool. vi. p. 422 (1899) (Prahsu).

Prahsu, Fumsu, and Krachi.

Abundant in the forest, its Chat-like note being continually heard. In our immature birds the wings lack the olive-greenish tinge of the adults, and are more rufous, while the lower mandibles are brownish horn-coloured.

104. ANDROPADUS MINOR Bocage. Andropadus minor Sharpe, Cat. B. vi. p. 400. Prahsu and Fumsu. This species comes very close to *A. virens*, but is characterized by being slightly smaller, while the under parts from the chest downwards are more strongly washed with yellow, especially the axillaries.

105. Вжородом INDICATOR (J. et E. Verr.).
Bæopogon indicator Shelley, B. Afr. i. p. 62.
Xenocichla indicator Sharpe, Cat. B. vi. p. 103.
Phyllostrephus indicator Reichen. J. f. O. 1897, p. 43
(Togoland).

Prahsu and Kumasi.

106. BÆOPOGON LEUCOPLEURUS (Cass.). Bæopogon leucopleurus Shelley, B. Afr. i. p. 62. Xenocichla leucopleura Sharpe, Cat. B. vi. p. 104. Prahsu, Fumsu, and Kumasi.

107. CRINIGER BARBATUS (Temm.).

Criniger barbatus Sharpe, Cat. B. vi. p. 82; Reichen. J. f. O. 1897, p. 44 (Togoland).

Fumsu and Kwissa.

This bird keeps to the thickest portions of the forest, and is more often heard than seen. The note is a sharp scolding "churr."

108. CRINIGER FLAVICOLLIS (Sw.). Criniger flavicollis Shelley, B. Afr. i. p. 62. Xenocichla flavicollis Sharpe, Cat. B. vi. p. 97. Gambaga.

This Bulbul is rare, and is not found in the thick forest, but frequents the wooded banks of streams in the less enclosed country.

109. CRINIGER SIMPLEX (Hartl.).

Criniger simplex Shelley, B. Afr. i. p. 63.

Xenocichla simplex Sharpe, Cat. B. vi. p. 99.

Phyllostrephus simplex Reichen. J. f. O. 1897, p. 43 (Togoland).

Cape Coast, Prahsu, Kwissa.

This is a shy bird, keeping much to the thick bush. Its babbling notes, which are not unpleasant, are generally heard towards evening.

110. CRINIGER GRACILIROSTRIS (Strickl.).

Criniger gracilirostris Shelley, B. Afr. i. p. 63.

Andropadus gracilirostris Reichen. J. f. O. 1897, p. 44 (Togoland).

Chlorocichla gracilirostris Sharpe, Cat. B. vi. p. 114; Hartert, Nov. Zool. vi. p. 422 (Gold Coast).

Prahsu, Fumsu, and Kwissa.

111. CRINIGER VERREAUXI Sharpe.

Criniger verreauxi Sharpe, Cat. B. vi. p. 73; Shelley,

B. Afr. i. p. 63; Reichen. J. f. O. 1897, p. 44 (Togoland). Prahsu and Fumsu.

112. CRINIGER ALBIGULARIS Sharpe.

Xenocichla albigularis Sharpe, Cat. B. vi. p. 103.

Phyllostrephus albigularis Reichen. J. f. O. 1897, p. 56 (Togoland).

Prahsu.

The measurements of both our specimens (adult and young females) are larger than in typical *C. albigularis*. We shall, however, refer our birds to that species until further material is forthcoming. There is only one example (the type) in the British Museum. It has the following measurements:—Total length 5.8 inches, culmen 0.7, wing 2.7, tail 2.4, tarsus 0.75.

Adult  $\Im$  (Prahsu). Total length (measured in the flesh) 7 inches, culmen 0.7, tail 3.4, tarsus 0.8. Iris hazel; upper mandible brown, lower light horn-coloured; legs and feet brown. Our immature specimen has the white throat washed with buff.

113. PYRRHURUS SCANDENS (Sw.).

Pyrrhurus scandens Shelley, B. Afr. i. p. 64.

Phyllostrephus scandens Reichen. J. f. O. 1897, p. 43 (Togoland).

Xenocichla scandens Sharpe, Cat. B. vi. p. 102; Reichen. J. f. O. 1891, p. 391 (Togoland).

River Volta. This Bulbul is rare. We never met with it in Ashanti.

114. PYRRHURUS SERINUS (J. et E. Verr.). Pyrrhurus serinus Shelley, B. Afr. i. p. 64. Xenocichla serina Sharpe, Cat. B. vi. p. 100. Kumasi.

By no means common.

115. TURDINUS GULARIS (Sharpe). Turdinus gularis Sharpe, Cat. B. vii. p. 543. Fumsu.

116. TURDINUS FULVESCENS (Cass.). Turdinus fulvescens Sharpe, Cat. B. vii. p. 545. Prahsu.

117. HYLIA PRASINA Cass.

*Hylia prasina* Sharpe, Cat. B. vii. p. 172; Reichen. J. f. O. 1891, p. 393, et 1897, p. 49 (Togoland).

Prahsu and Fumsu.

This bird is common in the clearings of the forest ; it feeds on insects, which it catches on the wing after the manner of a Flycatcher.

The male is larger than the female.

118. PHOLIDORNIS RUSHIÆ Cass. Pholidornis rushiæ Sharpe, Cat. B. x. p. 77. Fumsu.

The single specimen obtained was shot at the top of a high forest-tree: we never observed another.

119. EREMOMELA PUSILLA Hartl.

Eremomela pusilla Sharpe, Cat. B. vii. p. 160; Reichen. J. f. O. 1891, p. 394, et 1897, p. 50 (Togoland); Hartert, Nov. Zool. vi. p. 421 (Gambaga).

Gambaga and Sekwi.

Adult  $\mathfrak{P}$ . It is grey; upper mandible brown, lower yellowish horn-coloured; legs and feet slaty brown.

Found in the open bush-country, especially where there is *Acacia*-growth.

120. EREMOMELA BADICEPS (Fraser). Eremomela badiceps Sharpe, Cat. B. vii. p. 165. Rare: two specimens obtained at Prahsu.

121. CAMAROPTERA BREVICAUDATA (Rüpp.).

Camaroptera brevicaudata Shelley & Buckley, Ibis, 1872, p. 287 (Aguapim); Sharpe, Cat. B. vii. p. 168.

Camaroptera tincta Reichen. J. f. O. 1897, p. 49 (Togoland).

Gambaga and Krachi.

The Krachi bird, obtained in May, is typical C. brevicaudata, and is identical with specimens procured at Zumbo on the Zambesi, and with Abyssinian examples in the British Museum.

Male, Dec. 28, 1900 (first winter plumage). Upper parts uniform ashy brown, becoming buffy behind the eye and earcoverts; wing-coverts olive-yellow, brighter on the outside of the quills and secondaries; chest and flanks washed with pale buff; chin, throat, and abdomen greyish white; thighs tawny yellow; bill brownish black; legs and feet reddish flesh-coloured.

This being a transitional plumage, individual variations may be noticed. Some birds (the youngest) have their under parts washed with decided buff, while others have the ashy grey of the upper parts flecked with old ashy-brown feathers.

Regarding C. tincta I am unable to detect any specific distinction from C. brevicaudata.

This species frequents thick undergrowth by streams and rivers. It is a silent bird, its time being always fully occupied in searching after food. 122. CAMAROPTERA CONCOLOR Hartl.

Camaroptera concolor Shelley & Buckley, Ibis, 1872, p. 291 (Aguapim); Sharpe, Cat. B. vii. p. 170.

Prahsu, Fumsu, and Kwissa.

Common in the forest.

123. CAMAROPTERA SUPERCILIARIS (Fraser). Camaroptera superciliaris Sharpe, Cat. B. vii. p. 171. Prahsu.

124. Syviella brachyura Lafr.

Sylviella brachyura Grant, Ibis, 1900, p. 154.

Upper White Volta and Krachi.

A rare bird in the Hinterland. We know of no previous records of it from the Gold Coast or from Togoland.

Our specimens exactly agree with Abyssinian examples in the British Museum.

125. Sylviella flaviventris Sharpe.

Sylviella flaviventris Sharpe, Cat. B. vii. p. 157.

Prahsu and Fumsu.

The immature male is olive-brown above; the head is rufous brown; the brownish buff of the throat extends to the chest in place of olive-green; the abdomen is whitish, fading into ashy on the flanks. In the adult these parts are sulphuryellow.

126. EMINIA CERVINIVENTRIS (Sharpe).

Eminia cerviniventris Shelley, B. Afr. i. p. 71.

Apalis cerviniventris Sharpe, Cat. B. vii. p. 139.

An adult male from Kwissa.

This specimen agrees with the example from Denkera in the British Museum in having the throat black and the sides of the chest chestnut. The Gold-Coast example in the same collection, with no black on the throat and no chestnut on the flanks, is without doubt a female.

127. APALIS NIGRICEPS. (Plate VII.)

Dryodromas nigriceps Shelley, Ibis, 1873, p. 139.

Apalis nigriceps Shelley, B. Afr. i. p. 72; Alexander, Bull. B. O. C. vol. xii. p. 12 (Prahsu).

Prahsu.

The type in the British Museum, obtained by Capt. Shelley at Abouri, Gold Coast, is an immature specimen; the head is like that of our adult female, but there is no black on the breast, and the feathers of the thighs are whitish instead of grey as in the adult.

Description of the adult female. Similar in dimensions to the male. Crown of head blackish slate-coloured, not entirely black; chin and throat white, tinged with buff; black collar on the fore-neck narrower.

This bird is probably *A. cervicalis* of Reichenow. It comes very close to the figure of that species in the 'Journal für Ornithologie' (1896, p. 40, pl. v. fig. 1).

128. ORTHOTOMUS ERYTHROPTERUS (Jard.).

Orthotomus erythropterus Sharpe, Cat. B. vii. p. 228; Reichen. J. f. O. 1891, p. 393, et 1897, p. 49 (Togoland).

Gambaga, Kwobia, Salaga, Krachi, and Accra.

The specimens killed at Gambaga in January are in their first winter plumage. The upper parts are uniform pale brick-red and the wings rufous. The example obtained at Salaga (May 14th) is changing into the fully adult plumage. At Accra, a month later, the birds were in full breedingdress, with the upper parts vinous grey, a little darker on the head, lores, and ear-coverts, and the wings rufous.

The length of the tail varies from 2.3 to 1.8 inches in this species. The birds in winter plumage have the longest rectrices. This species is locally distributed. At Gambaga it was fairly numerous on open stretches of ground, and again at Accra. It had not previously been obtained in the Hinterland.

129. РКІМІА МУЗТАСЕА ВÜРР.

Prinia mystacea Sharpe, Cat. B. vii. p. 191; Hartert, Nov. Zool. vi. p. 421 (Gambaga).

Gambaga, Prahsu, Kwissa, Kintampo, Salaga, and Yeji.

Our specimens in the first plumage have the upper parts light brown, washed with tawny, especially on the rump, while the under parts are pale yellowish buff, stronger on the flanks and under tail-coverts. The tail is long; the iris SER. VIII.—VOL. II. Y light orange; the legs and feet flesh-coloured; the upper mandible is brown, the lower light horn-coloured.

It may be noticed that our adults were obtained both in winter and summer. All the specimens are in the dark plumage of maturity. From this it would appear that the adults have no seasonal dress.

130. CISTICOLA CISTICOLA (Temm.). Cisticola cisticola Sharpe, Cat. B. vii. p. 259. Accra.

A male obtained on June 21st is in worn breeding-plumage, the crown being almost uniform brown on account of abrasion. On the inner webs of the tail-feathers there is a distinct rufous subterminal mark.

Our other male specimen is in the striped dress, with the central tail-feathers brown, the remainder being dark brown, tipped with pale buff, and with a black subterminal bar.

During our stay on the West Coast we never met with this species anywhere except at Accra, where it is plentiful.

131. CISTICOLA STANGERI (Fraser).

Cisticola stangeri Sharpe, Cat. B. vii. p. 276; Reichen. J. f. O. 1897, p. 49 (Togoland); Hartert, Nov. Zool. vi. p. 421 (Gambaga).

Gambaga, Salaga, Krachi, Pong, and Accra.

The specimens obtained in January and February were in their first winter dress. In May and June this bird was breeding and in summer plumage. The female is smaller than the male.

We found this *Cisticola* common around Salaga and Accra. Towards evening it was often seen climbing the tall grasses and posing like a Reed-Warbler.

132. CISTICOLA SUBRUFICAPILLA (Smith).

Cisticola subruficapilla Sharpe, Cat. B. vii. p. 283.

Gambaga.

Our specimens are in winter plumage, with the crown uniform rufous. This *Cisticola* had not been previously recorded from the West Coast. 133. CISTICOLA CINERASCENS (Heugl.).

Cisticola cinerascens Sharpe, Cat. B. vii. p. 248; Reichen. J. f. O. 1897, p. 48 (Togoland).

Gambaga, Salaga, and Accra.

The specimens killed in May and June are in full breedingdress. The sexes are alike in measurements.

This species is rare in the Hinterland, but fairly common near the coast.

134. CISTICOLA ERYTHROPS (Hartl.).

Cisticola erythrops Sharpe, Cat. B. vii. p. 250; Reichen. J. f. O. 1891, p. 393 (Togoland); Hartert, Nov. Zool. vi. p. 421 (Gambaga).

Kumasi and Yeji.

Hab. West Africa, from the Gold Coast to the Congo; also East Africa in the Zanzibar district.

135. CISTICOLA LATERALIS (Fraser).

Cisticola lateralis Sharpe, Cat. B. vii. p. 251; Reichen. J. f. O. 1897, p. 48 (Togoland).

Kintampo, Batenga, Salaga, and Krachi.

Adult 3 (winter plumage), 30/11/00. General colour above uniform rufous brown; wing-coverts like the back; quills and secondaries brown, edged with dark rufous; rump dark ashy brown; upper tail-coverts like the back; tail-feathers brown, externally rufescent; tips lighter, with broad subterminal bar of black; lores whitish; under parts white, washed with pale tawny buff on the chest, flanks, and under tail-coverts; thighs deep tawny; axillaries and sides of wing whitish; quills below dusky, inner edges rufous; bill brownish black; lower mandible whitish horn-coloured; legs and feet reddish flesh-coloured.

Adult 3 (summer plumage), 17/5/01. Plumage similar to that of winter, but dark dusky brown above, becoming ashy grey on sides of face and chest; under parts white; sides of body and flanks ashy brown; under tail-coverts buffish white; bill black; tip of lower mandible whitish horncoloured.

One of the specimens obtained at Batenga in May is

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changing into the summer plumage; the upper parts are much mottled, the new dark brown feathers contrasting strongly with the old rufous brown of the winter plumage.

This species is not found in the Hinterland.

136. CISTICOLA RUFA (Fraser).

Cisticola rufa Sharpe, Cat. B. vii. p. 252: Reichen. J. f. O. 1897, p. 49 (Togoland); Hartert, Nov. Zool. vi. p. 421 (Gambaga).

Gambaga, Batenga, and Krachi.

The winter plumage of this species differs from the summer dress in being rufous brown above, brighter on the rump and upper tail-coverts; the chest, sides of body, and flanks are washed with pale buff. The specimens killed in May are uniform dark brown above, reddish brown on the rump and upper tail-coverts. In the winter plumage the tails are longer.

The sexes are alike in measurements.

137. MELOCICHLA MENTALIS Fraser.

Melocichla mentalis Reichen. J. f. O. 1891, p. 393, et 1897, p. 48 (Togoland); Shelley, B. Afr. i. p. 76; Hartert, Nov. Zool. vi. p. 421 (Gambaga).

Cisticola mentalis Sharpe, Cat. B. vii. p. 241.

Daboya, Krachi, Pong, and Accra.

This species is widely distributed, inhabiting the tall elephant-grass. The flight is very straight.

It is curious that in our large series we did not obtain any females. The breeding-season is, no doubt, in May and June. In freshly-moulted birds the tails are very long.

138. Hypolais polyglotta (Vieill.).

Hypolais polyglotta Shelley, B. Afr. i. p. 80; Reichen. J. f. O. 1897, p. 51 (Togoland).

An adult male from Kintampo.

139. PHYLLOSCOPUS SIBILATRIX (Bechst.).

Phylloscopus sibilatrix Seebohm, Cat. B. v. p. 54; Reichen.

- J. f. O. 1897, p. 51 (Togoland). Phullopneuste sibilatrix (Bechst.); Shelley, Ibis, 1872,
- p. 291 (Cape Coast). Sekwi, Gold Coast Hinterland.

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140. Sylvia sylvia.

Sylvia sylvia Shelley, B. Afr. i. p. 81; Reichen. J. f. O. 1897, p. 50 (Togoland).

Gambaga.

141. FRASERIA OCREATA (Strickl.).

Fraseria ochreata Sharpe, Cat. B. iii. p. 303 (1877).

Ad. 3 9, 12/8/00, Prahsu. Ad. 9 9 3, 26/6/00; ad. 9, 20/7/00, Prahsu. Imm. 9, ad. 9 9, 27/9/00, Fumsu. Ad. 3, 16/10/00, Kwissa.

Common in the forest, frequenting the tops of the tall trees. In our large series none of the specimens have white tufts in front of the eye, as in the closely allied, but distinct, species *F. cinerascens*.

142. Alethe diademata (Bp.).

Alethe diademata Sharpe, Cat. B. vii. p. 58; Reichen. J. f. O. 1891, p. 392 (Togoland).

A pair from Prahsu.

143. Cossypha verticalis (Hartl.).

Cossypha verticalis Sharpe, Cat. B. vii. p. 45; Reichen. J. f. O. 1891, p. 394, et 1897, p. 50 (Togoland); Hartert, Nov. Zool. vi. p. 420 (Gambaga).

Cape Coast, Gambaga, Salaga, and Krachi.

Locally distributed and generally observed in pairs. Thickets bordering streams and rivers are its favourite resorts. A series of rapid babbling notes are uttered by the male bird; they become persistent just after rain or towards evening. At Gambaga we obtained only one specimen—an adult male; this differs from our other examples in being larger, while the outer tail-feather is bright orange on both webs. We shall, however, for the present, refer it to C. verticalis.

144. Cossypha GIFFARDI Hartert.

Cossypha giffardi Hartert, Nov. Zool. vi. p. 420 (Gambaga).

We obtained a single specimen of this species. It does not seem to be found at Gambaga, but to the northward along the banks of the Upper White Volta River. 145. BESSONORNIS GAMBAGÆ Hartert.

Bessonornis gambagæ Hartert, Nov. Zool. vi. p. 420 (Gambaga).

Ad. 3, 16/12/00; ad. 3 3 9, 17/1/01; ad. 9, 18/2/01, Gambaga.

This new species, as compared with its near ally, *B. modestus*, has the upper parts paler and more ashy, and the chestnut on the rump not so bright. The blackish spot on the inner web of the outermost rectrix (another of its supposed characters) is not constant, since in several of our specimens the black extends across both webs as in *B. modestus*; there is, moreover, little difference in the measurements of the two species.

We found this bird at Gambaga, frequenting rocky kopjes in pairs. It was breeding in the middle of December, making its nest underneath large stones.

146. PRATINCOLA RUBETRA (Linn.).

Pratincola rubetra Sharpe, Cat. B. iv. p. 179; Reichen. J. f. O. 1897, p. 51 (Togoland); Hartert, Nov. Zool. vi. p. 421 (Gambaga).

Kintampo and Gambaga.

Common in the Hinterland from November to February.

147. RUTICILLA PHENICURA (Linn.).

Ruticilla phænicura Shelley, B. Afr. i. p. 85.

Gambaga, 3, 28th December, 1900.

The occurrence of the Redstart in the Gold Coast Colony has not been noticed before.

148. TURDUS PELIOS Bp.

Turdus pelios Shelley, B. Afr. i. p. 88.

Kintampi and Lower White Volta.

The flanks of our specimens are washed with buffishchestnut, and the bird, therefore, according to Seebohm's key, is *T. pelios*.

The measurement of wing varies from 4.8 to 4.4 inches.

149. MONTICOLA SAXATILIS (Linn.).

Monticola saxatilis Shelley, B. Afr. i. p. 89; Hartert, Nov. Zool. vi. p. 420 (Gambaga).

Gambaga.

The flight of this Rock-Thrush is very straight. When perched its actions are like those of a Wheatear.

150. SAXICOLA GENANTHE (Linn.).

Saxicola œnanthe Seebohm, Cat. B. v. p. 394; Hartert, Nov. Zool. vi. p. 420 (Gambaga).

A pair obtained at Gambaga, February 6th, 1901.

151. PENTHOLÆA ALBIFRONS (Rüpp.).

Pentholæa albifrons Sharpe, Cat. B. vii. p. 18; Reichen. J. f. O. 1891, p. 394 (Togoland); Hartert, Nov. Zool. vi. p. 420 (Gambaga).

Gambaga and Sang.

Nestling. Feathers edged and tipped with rusty brown.

Immature male. As in the adult female, the white frontal patch is assumed last.

Adult female. Uniform blackish brown above and below.

We found this species locally distributed in the Hinterland in open stone-strewn country, where it breeds in January, making its nest of dried grass underneath large boulders.

The male sings prettily, and when alarmed gives vent to a string of chattering notes, the last being prolonged and plaintive.

152. MELÆNORNIS EDOLIOIDES (Sw.).

Mclænornis edolioides Sharpe, Cat. B. iii. p. 315; Reichen. J. f. O. 1892, p. 235 (Togoland); Hartert, Nov. Zool. vi. p. 418 (Gambaga).

Gambaga.

This bird is locally distributed, frequenting the thickets of fish-cane near the streams. It is shy and retiring in its nature, and was not observed anywhere except in the Hinterland.

153. BRADYORNIS PALLIDUS (v. Müller).

Bradyornis pallidus Sharpe, Cat. B. iii. p. 310; Shelley, B. Afr. i. p. 93.

Bradyornis modestus Reichen. J. f. O. 1897, p. 26 (Togoland); Hartert, Nov. Zool. vi. p. 419 (Gambaga).

Gambaga, Gomieri, and Batenga.

First winter plumage. General colour above brown; rump

washed with rufous; lesser, median, and greater wingcoverts externally edged and tipped with rufous fawn; quills and secondaries externally edged with the same, the latter tipped with fulvous; under surface light ashy brown, whitish on chin, throat, and abdomen; flanks and under tailcoverts washed with rufous fawn; tail-feathers brown, tipped with tawny buff; under wing-coverts and inner linings to quills tawny. ( $\Im$ , Kintampo, 30/11/00.)

Adult male (25/4/01, Gambaga). Upper parts uniform pale brown; the rufous edgings to the wing-coverts and quills have almost disappeared, leaving hoary whitish margins; lores and ring round each eye dull white; under parts white, washed with pale ashy brown on the fore-neck, chest, and flanks; under wing-coverts and inner edges of quills pale fawn-coloured; under tail-coverts white; tail-feathers brown, edged with pale brown. Total length (in flesh) 6.5 inches, wing 3.28, culmen 0.6, tail 3.2.

This species is widely distributed over the open country and is migratory in its habits.

154. MUSCICAPA GRISOLA Linn.

Muscicapa grisola Linn.; Sharpe, Cat. B. iv. p. 151; Reichen. J. f. O. 1897, p. 26 (Togoland).

Two adult males were obtained at Kwissa on October 16th, 1900.

155. MUSCICAPA CÆRULESCENS Hartl.

Muscicapa cærulescens Sharpe, Cat. B. iv. p. 154; Reichen. J. f. O. 1897, p. 26 (Togoland).

Muscicapa cinerascens Sharpe, Cat. B. iv. p. 94.

Krachi, 2 ad. Iris hazel; bill horn-brown, base of lower mandible light yellowish; legs and feet brown.

Our example agrees well with specimens from South Africa in the British Museum.

The type of the subspecies, *M. cinerascens*, is in worn plumage, as is also a typical specimen from Abouri (ad.  $\Im$ , Feb. 21, 1872, Shelley Mus.). An example of *M. cærulescens* in the British Museum from Biballa, Angola (ad.  $\Im$ , Feb. 1868, *Anchieta*), is in worn plumage, and in this condition is identical with the Abouri specimen. Our bird, however, is in fresh plumage, although there are still a few old feathers on the upper parts which correspond to the dull plumage of the subspecies.

The general delicate blue-grey coloration of M. cærulescens soon disappears through age and abrasion, giving to the bird a more dull and ashy appearance, especially on the feathers of the upper parts. This may be noticed in several specimens in the British Museum from South Africa and Angola.

The fresh plumage of this Flycatcher quickly becomes stained and worn, owing to the active habit it possesses of working its way through the network of branches of thickleaved trees in search of insects.

156. MUSCICAPA MODESTA Hartl. Muscicapa modesta Sharpe, Cat. B. iv. p. 156. Prahsu and Fumsu. Uncommon, and only found in the forest.

157. MUSCICAPA COLLARIS Bechst.

Muscicapa collaris Sharpe, Cat. B. iv. p. 160; Hartert, Nov. Zool. vi. p. 419 (Gambaga).

Two males, killed at Gambaga (Feb. 1st) and Kintampo (Nov. 11th) respectively, resemble the adult female. A third male, obtained on April 7th, is changing into the plumage of the adult male.

158. Alseonax GAMBAGÆ Alexander. Alseonax gambagæ Alex. Bull. B. O. C. xii. p. 11. Gambaga, ad. 3.

This species is nearly allied to *A. murinus*, but is larger, and differs in the following characters :—General colour above light brown ; under parts white, tinted with brown on the lower throat and sides of chest, where there are a few obscure brown shaft-stripes. Total length (in flesh) 4.7 inches, wing 3, tail 2.4, tarsus 0.5. Iris black ; upper mandible dark brown, lower pale horn-coloured ; legs and feet brown.

Hab. Gambaga, Gold Coast Hinterland.

159. Alseonax comitata (Cass.).

Butalis comitata Shelley & Buckley, Ibis, 1872, p. 287 (Cape Coast).

Alseonax comitata Sharpe, Cat. B. iv. p. 130. Prahsu and Fumsu.

This species is uncommon, and is found only in the forest. The female is larger than the male.

160. ALSEONAX FANTENSIS Sharpe. Alseonax fantensis Sharpe, Cat. B. iv. p. 131. Prahsu and Fumsu.

161. ARTOMYIAS USSHERI Sharpe. Artomyias ussheri Sharpe, Cat. B. iv. p. 144. Fumsu and Kwissa.

Rare and of local distribution, frequenting the tops of tall leafless trees. From time to time these birds dart out from their high points of vantage to catch passing insects, returning again to the same places after the manner of Flycatchers. The same observation applies to the West-African species of *Alseonax*, to which genus *Artomyias* is very closely allied.

162. CASSINIA FINSCHI Sharpe.

Cassinia finschi Sharpe, Cat. B. iv. p. 467.

Rare. Two specimens were obtained on the Monse Hills at an altitude of 1300 feet.

163. HYLIOTA FLAVIGASTRA SW.

Hyliota flavigastra Sharpe, Cat. B. iv. p. 248; Reichen. J. f. O. 1897, p. 27 (Togoland).

Gambaga.

This species was only observed by us in the Hinterland. It is decidedly uncommon, frequenting the open bushcountry. The specimen obtained was in company with a number of other Flycatchers (*Batis senegalensis*).

164. Hyliota Nehrkorni Hartl.

Hyliota nehrkorni Hartl. Ibis, 1892, p. 373, pl. viii.

Prahsu, adult  $\mathcal{J}$ . Total length (measured in the flesh) 4.2 inches, culmen 0.4, wing 2.9, tarsus 0.65.

Unfortunately we obtained only one example of this rare

species, which is not represented by a single specimen in the British Museum. The type came from Accra, and was described by Hartlaub, whose description agrees fairly well with our example, although the figure is misleading. The under parts of our bird are almost uniform pale ochraceous, not deeper on the breast and fore-neck as in typical *H. nehrkorni*, while *all*, and *not only the middle* tail-feathers, are glossed with steel-blue.

These may possibly be sexual differences.

165. SMITHORNIS RUFILATERALIS Gray.

Smithornis rufilateralis Sharpe, Cat. B. iv. p. 389; Reichen. J. f. O. 1891, p. 383, et 1897, p. 29 (Togoland).

An adult male from Fumsu.

166. MEGABIAS FLAMMULATUS Verr.

Megabias flammulatus Sharpe, Cat. B. iv. p. 140; Reichen. J. f. O. 1897, p. 28 (Togoland).

Prahsu.

This bird inhabits the thick forest undergrowth. It is shy and difficult to approach, seeking safety by flying from one high tree to another, while uttering from time to time a harsh "churr, churr." It is by no means common.

167. DIAPHOROPHYIA CASTANEA (Fraser).

Diaphorophyia castanea Sharpe, Cat. B. iv. p. 140; Reichen. J. f. O. 1897, p. 29 (Togoland).

Prahsu and Fumsu.

Rare; resorts mostly to the high forest trees.

168. PLATYSTIRA CYANEA (Müll.).

Platystira cyanea Sharpe, Cat. B. iv. p. 145; Reichen. J. f. O. 1891, p. 383, et 1897, p. 29 (Togoland); Hartert, Nov. Zool. vi. p. 419 (Gambaga).

Cape Coast, Prahsu, Gambaga, Salaga, and Krachi.

169. PACHYPRORA SENEGALENSIS (Linn.). Pachyprora senegalensis Shelley, B. Afr. i. p. 98. Batis senegalensis Reichen. J. f. O. 1897, p. 29 (Togo-

land); Hartert, Nov. Zool. vi. p. 419 (Gambaga).

Kintampo, Gambaga, and Krachi.

Keeps much to low bushes in the open country.

170. Elminia longicauda (Sw.).

Elminia longicauda Sharpe, Cat. B. iv. p. 363; Reichen. J. f. O. 1897, p. 27 (Togoland); Hartert, Nov. Zool. vi.

p. 419 (Gambaga).

Gambaga and Krachi.

Locally distributed, haunting the belts of fish-canes near the streams.

171. TROCHOCERCUS NITENS Cass.

Trochocercus nitens Sharpe, Cat. B. iv. p. 301; Reichen. J. f. O. 1897, p. 28 (Togoland).

Prahsu.

172. TERPSIPHONE CRISTATA (Gm.).

Terpsiphone viridis Reichen. J. f. O. 1897, p. 27 (Togoland); Hartert, Nov. Zool. vi. p. 419 (Gambaga).

Terpsiphone cristata Sharpe, Cat. B. iv. p. 354; Reichen. J. f. O. 1891, p. 383 (Togoland).

Gambaga and Krachi.

In our adult male the middle tail-feathers are pure white, a few of the others are still in a transitional stage, changing without a moult from red to pure white with black shafts. In our young male the tail-feathers are red, changing to white, the secondaries being broadly edged with white. In the adult female the tail-feathers are uniform red, the secondaries being edged with chestnut.

173. TERPSIPHONE NIGRICEPS (Temm.).

Terpsiphone nigriceps Sharpe, Cat. B. iv. p. 359; Reichen. J. f. O. 1897, p. 28 (Togoland).

Prahsu and Fumsu.

Our two female specimens, obtained at Prahsu and Fumsu, are much less bright on the upper parts than the male; the crowns are dull velvety black, with little or no gloss on the feathers; the tail-feathers are dirty reddish brown.

In the British Museum there are three specimens of this species from Ashanti, which are similar to our female examples. In the forest-glades, where the sun can penetrate, this beautiful Flycatcher may be seen dropping silently from one bough to another and uttering now and again its pleasing and pretty song.

174. HIRUNDO RUSTICA Linn.

Hirundo rustica Shelley & Buckley, Ibis, 1872, p. 288 (Gold Coast); Sharpe, Cat. B. x. p. 128; Reichen. J. f. O. 1897, p. 27 (Togoland).

An adult male from Karaga, obtained May 5th, 1901.

175. HIRUNDO NIGRITA Gray.

Hirundo nigrita Sharpe, Cat. B. x. p. 148; Reichen. J. f. O. 1897, p. 25 (Togoland).

Prah and Volta Rivers.

Found along the rocky portions of the streams. Breeds in August.

176. HIRUNDO PUELLA.

Hirundo puella Sharpe, Cat. B. x. p. 154. Sekwi, Gold Coast Hinterland.

177. HIRUNDO DOMICELLA Finsch et Hartl.

Hirundo domicella Sharpe, Cat. B. x. p. 165; Reichen. J. f. O. 1897, p. 25 (Togoland); Hartert, Nov. Zool. vi. p. 422 (Gambaga).

178. HIRUNDO SENEGALENSIS (Linn.).

Hirundo senegalensis Sharpe, Cat. B. x. p. 168; Hartert, Nov. Zool. vi. p. 422 (Gambaga).

Karaga, Kwobia, and Pong.

Common. Breeds in the holes of the baobal-trees.

179. PSALIDOPROCNE OBSCURA (Hartl.).

Psalidoprocne obscura Sharpe, Cat. B. x. p. 203; Hartert, Nov. Zool. vi. p. 422 (Gambaga).

Cape Coast.

Generally seen on the wing towards evening, but remaining inert throughout the heat of the day.

[To be continued.]